

Claims

1. (Currently amended) A remodulator clock signal source, comprising:
 - a vestigial sideband demodulator, the demodulator being responsive to vestigial sideband transmissions containing timing information, the demodulator recovering the timing information; and
 - a signal path coupling the recovered timing information produced by the demodulator to a remodulator clock input so as to regulate the remodulator timing sequence, the remodulator clock signal source further comprising
 - a phase locked loop including a variable frequency oscillator coupled to the demodulator for generating clock pulses in response to the timing information; wherein the phase locked loop further comprises
 - an open loop operating condition characterized by an absence of data from the timing information wherein an oscillator correction signal substantially equal to the average value of correction signal over a recent time interval is generated, thereby causing the remodulator to operate without a correction signal from current timing information.
2. (Currently amended) A system comprising:
 - an input for receiving a modulated signal comprising timing information;
 - a demodulator coupled to the input for extracting the timing information;
 - a phase locked loop including a variable frequency oscillator coupled to the demodulator for generating clock pulses in response to the timing information; and
 - a remodulator coupled to the phase locked loop for receiving the generated clock pulses wherein

said phase locked loop has an open loop operating condition characterized by an absence of data from the timing information and wherein an oscillator correction signal substantially equal to the average value of correction signal over a recent time interval is generated, thereby causing the remodulator to operate without a correction signal from current timing information.

3, (Currently Amended) The system of claim 2, further comprising the variable frequency oscillator receiving a correction signal from the phase locked loop based upon the source of timing information, the variable frequency oscillator thereby having an accuracy substantially equal to the source of timing information when operating in a closed loop operating condition.

4. (Currently Amended) A system comprising:
an input for receiving a modulated signal comprising timing information;
a demodulator coupled to the input for extracting the timing information;
a phase locked loop coupled to the demodulator for generating clock pulses in response to the timing information;
a variable frequency oscillator, coupled to the phase locked loop, the variable frequency oscillator receiving a correction signal from the phase locked loop based upon the source of timing information, the variable frequency oscillator thereby having an accuracy substantially equal to the source of timing information; and
a remodulator coupled to the phase locked loop for receiving the generated clock pulses;
wherein the phase locked loop further comprises:
a first closed loop operating condition characterized by the generation of the correction signal to the variable frequency oscillator based upon data from the timing information; and

a second open loop operating condition characterized by an absence of data from the timing information , thereby causing the variable frequency oscillator to operate without a correction signal.

5. (Original) The system of claim 4, further comprising:

a value register coupled to the variable frequency oscillator and maintaining a value substantially equal to the average value of the correction signal over a recent time interval; and

a multiplexer, the multiplexer selectively coupling the value from the value register to the variable frequency oscillator in the open loop operating condition, and coupling the correction signal from the phase locked loop to the variable frequency oscillator otherwise.

6. (Original) A system according to claim 2, wherein the modulated signal is a VSB modulated signal containing high definition television information.

7. (Original) A system according to claim 6, wherein the VSB modulated signal is in accordance with the ATSC standard.

8. (Newly added) A system according to claim 4 wherein the modulated signal is a VSB modulated signal containing high definition television information.

9. (Newly added) A system according to claim 8, wherein the VSB modulated signal is in accordance with the ATSC standard.